

AMENDMENT TO CLAIMS

[Deleted material is struck-through and added material is underlined]

1.-6. (Canceled)

7. (Canceled)

8. (Canceled)

9. – 20. (Canceled)

21. (Previously Presented) An on-demand self-producing combustible gas electrolyzer system for the separation of water into a combustible gas for use in combustion equipment, such as welder and combustion engines, the electrolyzer system comprising:

an electrolyte reservoir having a top portion adapted to contain a generated combustible gas and a bottom portion containing electrolytic fluid comprising water;

electrolyzer, said electrolyzer being installed in a closed pressurized portion of the system;

an electrical conductor contained within the electrolyzer;

a pump fluidly interposed between the bottom of the electrolyte reservoir and the electrolyzer wherein the pump draws electrolytic fluid from the electrolyte reservoir and pumps it to the electrolyzer;

a radiator fluidly connected to and interposed between the electrolyzer and the electrolyte reservoir, the radiator adapted to cool the generated combustible gas before returning to the top portion of the electrolyte reservoir;

an interstitial space within the reservoir above the electrolytic fluid in the top portion of the electrolytic reservoir wherein the generated combustible gas accumulates; and

at least one dryer/filter means through which the generated combustible gas passes before being drawn as needed for use,

wherein the electrolyzer is adapted to separate water such that its constituents of H and O are not recombined and instead produced jointly to make a combustible gas composed of combinations of hydrogen and oxygen atoms structured according to a

general formula H_mO_n wherein m and n have null or positive integer values with the exception that m and n can not be 0 at the same time, and
wherein said combustible gas has a varying energy content depending on its use.

22. (Original) The electrolyzer system according to claim 21, wherein said combustible gas contains atomic hydrogen.

23. (Original) The electrolyzer system according to claim 21, wherein said combustible gas contains atomic oxygen.

24. (Original) The electrolyzer system according to claim 21, wherein the combustible gas instantly melts solids.

25. (Original) The electrolyzer system according to claim 21, wherein the combustible gas can be used as a fuel without the need of atmospheric oxygen.

26. (Original) The electrolyzer system according to claim 21, wherein the combustible gas can bond to combustible fuels via magnetic induction.

27. (Previously Presented) The electrolyzer system according to claim 21, wherein said combinations of hydrogen and oxygen atoms structured according to the general formula H_mO_n are clusters.

28. (Original) The electrolyzer system according to claim 21, wherein when said combustible gas is used as an additive to a combustible fuel, a combustion of said fuel having said additive results in an exhaust emission having less pollutants than a combustion of said fuel alone.

29. – 50. (Canceled)

51. (Canceled)